

**OBJECTIVES:** The main aims of this systematic review were to identify all relevant literature on clinical efficacy for biological medications in patients with psoriasis and to conduct an up-to-date meta-analysis. **METHODS:** The following comparators were considered for this analysis: adalimumab, etanercept, infliximab, and ustekinumab. A MEDLINE search was conducted until March 2013. The Cochrane Highly Sensitive Search Strategy was applied to identify randomized controlled publications and was combined with 'psoriasis' MeSH terms and drug names. Randomized, controlled, clinical trials with adults with moderate-to-severe psoriasis where the full paper can be obtained were included. Evidences were combined in a mixed treatment comparisons in a Bayesian framework. Efficacy was measured by the 75% and 90% improvement of Psoriasis Area Severity Index (PASI) at three months were analysed. **RESULTS:** Nineteen trials were included in this indirect comparison; treatment arms with off-label dosages were excluded. Each biologic showed significantly more favourable effect than placebo with respect to any level of PASI response. Significantly more patients on infliximab treatment met PASI75 endpoint than on etanercept, adalimumab or ustekinumab, combined odds ratios (95% confidence intervals) were 5.34 (2.29–12.50), 7.49 (3.31–16.92) and 3.64 (1.62–8.20) respectively. Similarly, significantly more patients on infliximab treatment met PASI90 endpoint than on adalimumab or etanercept, odds ratios were 6.12 (1.07–34.86) and 7.78 (1.02–59.01). No significant differences in terms of PASI75 and PASI90 improvements were observed between adalimumab, etanercept or ustekinumab. **CONCLUSIONS:** All biologics demonstrated statistically significant improvements compared to placebo. This review also showed that infliximab was significantly more efficacious than other biologics.

## PSS2

### COMPARATIVE EFFECTIVENESS OF PEAK AND TROUGH EFFECTS OF BIMATOPROST 0.03%/TIMOLOL 0.5% PRESERVATIVE-FREE FIXED COMBINATION FOR THE TREATMENT OF OPEN-ANGLE GLAUCOMA AND OCULAR HYPERTENSION

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**OBJECTIVES:** To evaluate the comparative effectiveness of bimatoprost 0.03%/timolol (BTFC) 0.5% preservative-free (PF) fixed combination solution in single dose vials (BTFC PF) for the treatment of glaucoma/ocular hypertension (OHT) compared to alternative combination therapies accounting for fluctuations in intraocular pressure (IOP). **METHODS:** A systematic review was conducted to identify randomised controlled trials investigating efficacy of combination therapies for the treatment of glaucoma/OHT; where efficacy is defined as IOP change from baseline. Maximum and minimum changes in IOP were used as a representation of peak and trough effects of medication. Prostaglandin/prostamide analog and timolol monotherapy trials were also included as key connectors. A Bayesian mixed treatment comparison (MTC) analysis was used to synthesise the resulting evidence base. Supportive probability of best and rankogram summary analysis were used to position treatments within the network based on efficacy. **RESULTS:** A total of 136 studies met the pre-determined MTC inclusion criteria in total; representing 24 unique treatment arms. BTFC PF was numerically superior to all treatments (monotherapies and combination therapies; preserved and PF therapies) in lowering IOP efficacy in both peak and trough analyses. This superiority was statistically significant ( $p < 0.05$ ) for 18/23 comparisons in both analyses. Lack of evidence is the likely reason for non-significance in remaining comparisons. The probability of the BTFC formulations (preserved or PF) being the best treatments in the network was 0.94 (94% chance) in the peak analysis and 0.90 (90% chance) in the trough analysis; BTFC PF specifically had a 57% chance in the peak analysis and 62% chance in the trough analysis. No other treatments had  $> 6\%$  chance. Overall ranking of BTFC PF and BTFC preserved in terms of IOP-lowering efficacy was 1<sup>st</sup> and 2<sup>nd</sup> respectively. **CONCLUSIONS:** BTFC PF showed the greatest clinical efficacy of any combination- or mono-therapy in reducing IOP from baseline in patients with glaucoma and/or OHT.

## PSS3

### BASILINE CHARACTERISTICS AND VITREORETINAL INTERFACE FEATURES IN PATIENTS WITH VITREOMACULAR TRACTION AND MACULAR HOLE FROM THE MIVI-TRUST CLINICAL PROGRAM

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**OBJECTIVES:** There is limited published evidence on demographic and vitreoretinal interface (VRI) characteristics of patients with vitreomacular traction (VMT), including when associated with macular hole (VMT+MH). Establishing insights into the characteristics of untreated VMT patients may contribute to a better understanding of the burden of VMT disease. The objective of our analysis is to describe baseline patient characteristics and VRI features in patients with persistent VMT included in the phase 3 ocriplasmin studies. This analysis reports on VMT patients without MH (VMT) and VMT patients with MH (VMT+MH). **METHODS:** Two randomized, double-masked, placebo-controlled trials designed to determine efficacy and safety of ocriplasmin for the treatment of VMT comprising of 652 patients (VMT n=499; VMT+MH n=153). Baseline characteristics included patient demographics (age, gender); eye-disorder characteristics (time since diagnosis, visual acuity (VA) in study eye (SE); VA in non-study eye (NSE), presence of pseudophakia and/or ERM; VRI features (focal adhesion  $\leq 1500$  microns; min-max MH width), VFQ-25 composite score. **RESULTS:** Baseline characteristics for VMT vs. VMT+MH patients were respectively: 72.6 versus 68.7 years; 62.7% versus 75.8% female. Time since diagnosis: 268 days versus 62 days; VA: SE 66.8 versus 55.9, NSE 73.5 versus 77.8. Pseudophakes: 38.7% versus 20.9%, concomitant ERM: 46.3% versus 15.8%. The majority of VMT patients presented with focal adhesion  $\leq 1500$  microns (69%) while VMT+MH patients presented with a min-max hole width of 272.7 microns. VFQ-25 composite score: 78.0 vs. 80.3. **CONCLUSIONS:** Baseline characteristics of the MIVI-TRUST ocriplasmin patient population show differentiations between patients with persistent VMT

versus those with associated MH. This analysis establishes the representativeness of the MIVI-TRUST patient population in the context of clinical practice.

## PSS4

### ATOPIC DERMATITIS: EVALUATION OF 2 DIFFERENT DRUG RELATED MANAGERMENTS

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**OBJECTIVES:** Atopic Dermatitis (AD) is a chronic relapsing skin condition and one of the most common skin diseases worldwide. Nowadays, the prevalence of AD is estimated to be between 5%-and-30% in children. AD onset is commonly before 5 years old in children. Therapeutic treatments include topical corticosteroids (CS) and long-term emollients as first-line therapy, followed by topical calcineurin inhibitors. Emollients represent one of the cornerstones of treatments for patients with AD. The aims of this study were to compare the drug related management and the drug related costs between children with AD treated by at least an emollient (composed of Glycerol [15 gr], Vaseline [8 gr] and liquid-paraffin [2gr] per 100 gr) and children not treated by emollient. **METHODS:** This was a retrospective analysis of data extracted from the "Disease Analyzer™" database, including anonymized data from medical files of the patients seen by a representative sample of French GP. Children with AD diagnosed before 1 year old were tracked for 12-months after the date of diagnosis. Only children monitored at least 1 year after the diagnosis were included in the analysis. Costs of AD treatments were calculated from a societal perspective. **RESULTS:** 49 children with AD were treated by the emollient (group 1) and 59 were not (group 2). 59.2% of children of group 1 were treated by CS vs 72.9% in group 2; the same trend was found for the prescription of antiseptic (24.5%-vs-27.1%) and antibiotic (10.2%-vs-13.6%). On the contrary, healing was more prescribed in the emollient group (32.7%-vs-25.4%). Average annual cost of prescribed dermatological drugs was estimated to be 139.8 € in the emollient group and 146.4 € in the other group. **CONCLUSIONS:** These preliminary results suggest that CS, which may have negative effects (skin fragility, infection, addiction and impact on growth), are less prescribed in the emollient group. Studies considering larger samples are warranted to confirm this trend.

## PSS5

### BASILINE PATIENT, OCULAR FEATURES AND MANAGEMENT OF A PATIENT POPULATION DIAGNOSED WITH VITREOMACULAR TRACTION: AN OBSERVATIONAL STUDY IN FLANDERS

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**OBJECTIVES:** Limited data is published on baseline characteristics of patients diagnosed with vitreomacular traction (VMT) or different macular hole (MH) stages. Aim of our study was to describe the baseline patient and ocular characteristics, and the management of patients diagnosed with diseases of the vitreomacular interface. **METHODS:** This was an observational study with retrospective design. The study sample included patients from a large tertiary care ophthalmology center in Flanders, who had at least 1 outpatient visit at the study center between July 2009 and May 2013. Patients presented with or without visual symptoms and were examined using optical coherence tomography (OCT) in both eyes. Patients diagnosed with other retinal diseases were excluded from this study. This analysis reports on the VMT cohort only. **RESULTS:** The study sample included a total of 509 patients of which 156 patients (191 eyes) presented with VMT. Mean (SD) age was 72.8 (9.8); 59% were female. Majority (73%) was referred by an ophthalmologist for symptoms of general vision loss (60%) and/or metamorphopsia (23%). Mean follow-up was 1.64 years. Eyes in which a vitrectomy was performed (n=41) presented with worse visual acuity (VA) compared with eyes managed through observation (0.43 versus 0.55;  $p = 0.029$ ). However, VA in fellow eye was significantly better in eyes managed with vitrectomy (0.7 versus 0.56,  $p = 0.039$ ). Metamorphopsia (61% versus 37%,  $p = 0.005$ ) and concomitant ERM (20% versus 9%,  $p = 0.049$ ) were significantly more prevalent in eyes managed through vitrectomy compared with observation. **CONCLUSIONS:** In a real-life population, visiting the outpatient clinic of a large tertiary care ophthalmology center, 31% of patients presented with VMT. Patients were predominantly managed through observation. Worse visual acuity of fellow eye, and presence of metamorphopsia or ERM were significantly associated with occurrence of vitrectomy.

## PSS6

### CHILDREN WITH ATOPIC DERMATITIS: MONITORING A FRENCH COHORT OVER A NINE-YEAR PERIOD

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**OBJECTIVES:** To assess the diseases associated with AD or that take over during the years following the diagnosis of the infant and to calculate the annual cost of treating these children. **METHODS:** The cohort includes infants with AD who have undergone consultation with their general practitioners between the beginning of 2000 to the end of 2003. The data gathered through the IMS database was entered by general practitioners, enabling tracking of patients. The tracking period was started after diagnosis. Only infants who were monitored for a minimum of one-year were included. A control group comprising infants without AD and who were monitored for at least a year was created. **RESULTS:** A total of 723 infants who met the criteria outlined were identified. In the first year following their birth, infants with AD had significantly more concomitant disorders, particularly respiratory disorders (85% vs. 76%), and asthma (8.9% vs 4.6%) or other types of dermatosis (46.9% vs. 28.2%) among others. During the nine-years of monitoring, the children of the AD cohort consumed more dermatological products than the children of the control-group did in terms of emollients or topical corticosteroids. As well, the AD group consumed more antiseptic products than the control group did in the first year (27.6% vs 14%). Children with AD were observed to consume more anti-asthma drugs, with a peak occurring at age 4. **CONCLUSIONS:** From an epidemiological perspective, this study